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REMARKS

This response is a full and complete response to the Office Action mailed December 23, 2004. In that Action the Examiner notes that claims 1-17 are pending, claims 1, 2, 6-12, 15 and 17 stand rejected, and claims 3-5, 13, 14 and 16 are objected to as being dependent from a rejected base claim.

By this response, Applicant amended claim 1 to clarify the invention defined therein, amended claims 13 and 16 to be in independent form, amended the dependency of claims 12 and 17, and cancelled claims 11 and 15.

I. REJECTION UNDER 35 U.S.C. §102

A. Claims 1, 2, 6-10, 15-17

Claims 1, 2, 6-10, 15 and 17 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 6,057,714 issued to Andrys et al. (hereinafter "Andrys"). Claim 1 has been amended to clarify an aspect of Applicant's invention and claim 15 has been cancelled. Claim 17 has been amended to depend from an allowable independent claim, claim 16. In light of these amendments, Applicant respectfully traverses the rejection.

Applicant's amended independent claim 1 defines the invention as follows:

*"A circuit comprising:
an input inductor-capacitor (LC) circuit;
a first and a second output inductor-capacitor (LC) circuit;
a first transistor connected to the input LC circuit and the first
output LC circuit; and
a second transistor connected to the first transistor and the
second output LC circuit;
wherein in differential mode said first and second output LC
circuits each form an output impedance matching network for first and
second output terminals, respectively, and in common mode said first
and second output LC circuits are grounded solely by operation of
said circuit." [Emphasis added]*

The amendment to claim 1 is well supported by FIG. 1 and it clarifies the concept that the circuit defined in claim 1 responds to common mode by grounding the first and second output LC circuits. There is no circuitry outside Applicant's active balun circuit

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that causes this grounding to occur. This is clear from the original specification and drawing filed by Applicant. Note that only the balun circuit is shown in FIG. 1 of the specification. Thus, it is only the balun circuit that can operate to cause grounding of the first and second output LC circuits.

In contrast, Andrys teaches a combined balun and mixer circuit in which inductors in the mixer circuit trap common mode product signals at twice the local oscillator frequency. These inductors, elements 54 and 56, are contained well outside Andrys' balun circuit and are well outside the group of elements alleged to correspond to those recited in Applicant's claim 1.

Even if the elements in Andrys' balun circuit correspond to Applicant's claimed elements as alleged by the Examiner, that combination is incapable of producing Applicant's claimed result wherein *"in common mode said first and second output LC circuits are grounded solely by operation of said circuit."* It is only Applicant's unique balun circuit that causes the grounding of the output LC circuits in common mode.

As a result, Applicant submits that independent claim 1 is not anticipated by Andrys. It is therefore believed that claim 1 is novel and allowable under 35 U.S.C. §102 and 35 U.S.C. §103.

Claims 2 and 6-10 depend, either directly or indirectly, from claim 1 and recite additional features thereof. As such and at least for the same reasons as discussed above, Applicant submits that these dependent claims are also not anticipated by Andrys. Therefore, it is believed that claims 2 and 6-10 are novel and allowable under 35 U.S.C. §102 and 35 U.S.C. §103.

B. Claim 11

Claim 11 stands rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,252,460 issued to Ito (hereinafter "Ito"). Since claim 11 has been cancelled, this rejection is inapplicable.

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II. REJECTION UNDER 35 U.S.C. §103

Claim 12 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Ito in view of U.S. Patent 6,441,688 issued to Lau et al. (hereinafter "Lau"). Claim 12, originally dependent from claim 11, is now dependent from amended independent claim 13. Since claim 13 is allowable as amended, it is submitted that claim 12 is also allowable in view of the amendment to its dependency. Accordingly, it is respectfully requested that the grounds for rejection of claim 12 be withdrawn.

III. ALLOWABLE SUBJECT MATTER

Claims 3-5, 13, 14 and 16 have been objected to as being dependent upon a rejected base claim. The Examiner has indicated the allowability of these claims, if rewritten in independent form including all the limitations of the base claim and any intervening claims. Applicant thanks the Examiner for indicating the allowable subject matter with respect to claims 3-5, 13, 14 and 16.

In view of the remarks above with respect to claim 1 and the claims dependent therefrom, Applicant believes that amended base claim 1 and all intervening claims are in allowable form and, as such, dependent claims 3-5, as they stand, are therefore in allowable condition. Therefore, Applicant requests that the foregoing objection to claims 3-5 be withdrawn.

Claims 13 and 16 have been amended to be in independent form. Accordingly, claims 13 and 16 are believed to be allowable. Claims 14 and 17, dependent from claims 13 and 16, respectively, are also believed to be allowable since they depend from allowable independent base claims.

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CONCLUSION

In light of the remarks above, Applicant submits that this application is in condition for allowance. Reconsideration and allowance are respectfully solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Gregory C. Ranieri, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

FEBRUARY 23, 2005



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